

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Canceled)
2. (Previously presented) The laser system of claim 34 wherein the optical channel comprises two optical channels and said transmission is simultaneous along the two optical channels.
- 3-7. (Canceled)
8. (Previously Presented) The laser system of claim 34 wherein said head includes a digit clip.
- 9-33. (Canceled)
34. (Currently Amended) A laser system for therapeutic treatment of bacteria in an infected site ~~with non-ionizing optical energy and without detrimental heat deposition or irreversible harm to a biological system including the infected site~~, the system comprising:
 - (a) a laser oscillator system configured and arranged to selectively emit near infrared radiation at a power density in one or both of a first wavelength range of about 865 nm to about 875 nm and a second wavelength range of about 925 nm to about 935 nm;
 - (b) a control connected to the laser oscillator system, the control configured and arranged to control the selective emission of near infrared energy at the power density from the laser oscillator system for absorption as non-ionizing optical energy to photodamage bacteria at the infected site without detrimental heat deposition or irreversible harm to the biological system at the infected site;
 - (c) an optical channel connected to the laser oscillator system, the optical channel configured and arranged for transmission of the near infrared radiation; and

(d) a head configured and arranged to deliver the near infrared energy from the laser oscillator system and the optical channel to bacteria in the infected site at the power density for absorption at the infected site.

35. (Currently Amended) The system of claim 34, wherein the control is configured and arranged to adjust the power density of the emitted near infrared energy, forming an adjusted power density, wherein the adjusted power density comprises a necessary bactericidal density to photodamage bacteria at the infected site.

36. (Canceled)

37. (Previously Presented) The system of claim 34, further comprising a housing configured and arranged to hold the laser oscillator system.

38-44. (Canceled)

45. (New) The system of claim 34, wherein a laser oscillator system configured and arranged to selectively emit near infrared radiation at a power density in both of a first wavelength range of about 865 nm to about 875 nm and a second wavelength range of about 925 nm to about 935 nm.

46. (New) The system of claim 45, wherein the near infrared energy from the laser oscillator system comprises a first portion at about 870 nm and a second portion at about 930 nm.

47. (New) The system of claim 45, wherein the control is configured and arranged to adjust the power density of the emitted near infrared energy, forming an adjusted power density,

wherein the adjusted power density comprises density sufficient to photodamage bacteria at the infected site without causing substantial thermolysis of bacteria at the infected site.

48. (New) The system of claim 47, wherein the control is configured and arranged to adjust the power density of the emitted near infrared energy create radical oxygen species to photodamage bacteria at the infected site without causing substantial thermolysis of bacteria at the infected site.

49. (New) The system of claim 47, wherein the control is configured and arranged to adjust the power density of the emitted near infrared energy to create a toxic singlet oxygen reaction to photodamage bacteria at the infected site without causing substantial thermolysis of bacteria at the infected site.